

This report is intended to be the first of a series of reports that will provide a detailed analysis of compound data<sup>1</sup> on fire incidents in Great Britain where sprinklers systems were reported over the period of 2018/19 to 2020/21.

The aim of the analysis is to focus on identifying trends, discussion points and insights relating to the use of sprinklers within Great Britain. The outcome of which will evidence that can be used to influence change making the installation of sprinklers the norm not the exception.

INCIDENT DATA  
REPORT ...  
FOCUS ON  
SPRINKLERS

British Automatic Fire Sprinkler Association

**bafsa**

## 1.0 PURPOSE BUILT BLOCKS OF FLATS

Post the Grenfell Tower fire, regulatory and sector changes relating to fire safety have occurred. One such change has been the increase in installations of sprinklers across the country with housing providers, local authorities and developers committing to install sprinklers in purpose-built block of flats on a new and retrofit basis.

Figures are not available to confirm the number of installations completed, or currently being undertaken across the country. However, data on fire incidents allows us to capture where sprinklers are reported and if they have activated. This provides a means to look at the trend of sprinkler incidents and by extension capture an indication of presence of sprinkler installations in the building population.

This report will focus on the 315 fires recorded where sprinklers were reported as being present in the following building types.

- Purpose built low rise, 1-3 storeys
- Purpose built medium high rise, 4-9 storeys
- Purpose built high rise 10 or more storeys

PURPOSE BUILT FLATS	2018/19	2019/20	2020/21	TOTAL INCIDENTS	%
1-3 storeys	16	4	5	25	7.9
4-9 storeys	17	34	17	68	21.6
10 or more storeys	52	95	75	222	70.5
Grand total				315	100

Table 1. Primary fires attended by fire rescue services in which sprinklers were reported

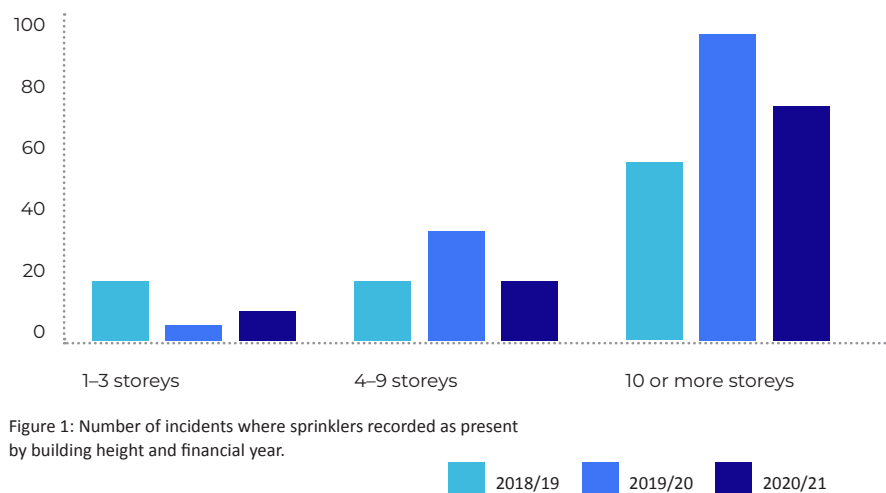


Figure 1: Number of incidents where sprinklers recorded as present by building height and financial year.

1. Source: FOI Requests for Incident Recording System Data relating to primary fires attended by FRSs in which sprinklers were present for England, Scotland, and Wales for the financial years 2018/19 to 2020/21

When the figures are broken down for the 3-year period, England account for the highest number of sprinklers reported as present following a fire.

**1.0 COMMENTS/OBSERVATIONS**

- The observation from table 2 that England dominates the figures is unsurprising based on the variation in the population figures and the number of high-rise residential buildings built since 1949 addressing the housing shortage across the UK.

Unsurprisingly most reported incidents with sprinklers present are within the category of 10 storeys or more, Table 1. This would be expected given the regulatory guidance from early 2000’s.

- Whilst the figures show an increase in the number of reported sprinklers present following a fire more data is needed to confirm a trend.
- The number of sprinklers saves resulting from the 315 incidents reported where sprinklers were present follows this data.

PURPOSE BUILT FLATS	ENGLAND	SCOTLAND	WALES	TOTAL
1-3 storeys	23	2	-	25
4-9 storeys	66	1	1	68
10 or more storeys	190	27	5	222
Grand total	279	30	6	315
	88.6%	9.5%	1.9%	100%

Table 2. Primary fires attended by fire rescue services in which sprinklers were reported by country.

